

Amendments to the Claims:

No amendments are made to the claims.

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Previously Presented) A semiconductor device comprising:
a substrate that includes a base layer, a buried oxide layer, and a semiconductor layer; and
an isolation layer that is formed in a trench that defines an active region of the
semiconductor layer,
wherein the trench comprises a first region having a depth less than the thickness of the
semiconductor layer and a second region having a depth at least equal to the thickness of the
semiconductor layer in a bottom portion of the first region, wherein the isolation layer includes
an oxide layer and a nitride liner that are sequentially formed on the surfaces of both the first and
second regions of the trench and a dielectric layer that fills the first and second regions of the
trench, and wherein the oxide layer is thicker in the first region than in the second region.
2. (Original) The semiconductor device of claim 1, wherein the depth of the first region is
less than the depth of the second region by 200 to 1500 Å.
3. (Canceled)
4. (Previously Presented) The semiconductor device of claim 1, wherein the oxide layer is
thicker in the first region than in the second region by 1 to 50 nm.
5. (Previously Presented) The semiconductor device of claim 1, wherein the thickness of
the oxide layer in the second region is in the range of 3 to 30 nm.
6. (Original) The semiconductor device of claim 1, wherein the thickness of the nitride liner
is in the range of 3 to 20 nm.

7. (Original) The semiconductor device of claim 1 further comprising a transistor formed in the active region.

8. (Previously Presented) The semiconductor device of claim 1, wherein the oxide layer in the first trench includes an oxide layer and an oxide liner, and the oxide layer in the second trench includes the oxide liner, wherein the oxide liner is formed by chemical vapor deposition (CVD).

9. (Previously Presented) A semiconductor device comprising:

a substrate that includes a base layer, a buried oxide layer, and a semiconductor layer, a first trench being formed in the semiconductor layer having a depth less than the thickness of the semiconductor layer, and a second trench being formed in the semiconductor layer having a depth at least equal to the thickness of the semiconductor layer and that is formed in a bottom portion of the first trench;

an oxide layer that is formed on an upper surface of the first trench;

an isolation layer that is formed on the first and second trenches that defines an active region of the semiconductor layer, wherein the isolation layer includes an oxide liner and a nitride liner that are sequentially formed on the oxide layer of the first trench and on an upper surface of the second trench, the oxide liner preventing direct contact between the nitride liner and the semiconductor layer in the first and second trenches, and wherein the oxide layer and oxide liner in the first trench is of a thickness that is greater than the oxide liner in the second trench; and

a dielectric layer that fills the first and second trenches.

10. (Previously Presented) The semiconductor device of claim 9, wherein the oxide liner is formed by chemical vapor deposition (CVD).